DARCYA (SCROPHULARIACEAE), A NEW GENUS FROM CENTRAL AND SOUTH AMERICA

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ABSTRACT

Darcya, a new genus belonging to the Scrophulariaceae is proposed. It is represented by three localized species previously treated within the genus Stemodia (s.l.), as follows: D. costaricensis (B.L. Turner) B.L. Turner, comb. nov., from Costa Rica; D. mutisii (Fern. Alonso) B.L. Turner, comb. nov., from Colombia; and D. reliquiarum (D'Arcy) B.L. Turner & C. Cowan, comb. nov., from Panamá. Descriptions of the Central American taxa are provided, along with a comprehensive key for identification purposes. Darcya does not appear to be especially close to Stemodia (s.l.), possessing a combination of unique characters not found in that genus or yet other genera of the tribe Gratioleae in which it is positioned.

KEY WORDS: Darcya, Stemodia, Scrophulariaceae, Gratioleae

Preparation of a synopsis of Stemodia (s.l.) for North and South America (Turner & Cowan 1993; in prep.) has occasioned the present paper. In our treatment for the New World we recognized ca. 32 species. In studying the considerable diversity within this group it became apparent that the several species discussed here could not be readily accommodated within Stemodia (s.l.) nor could they be readily placed in any other genus of our acquaintance. This was presaged by D'Arcy who noted that the generitype, Darcya reliquiarum, did not conform to any of the intrageneric groupings or closely related genera proposed by Minod (1918), "and might warrant recognition at the generic level". Darcya has the calyx and capsular characters of Stemodia (s.l.), but differs from the rest of the species in having pubescent anthers, very short styles, well defined terminal racemes, 3-5 principal nerves arising from near the base of the blade, and peculiar estipitate trapezoidal seeds.

Darcya (Scrophulariaceae) B.L. Turner & C. Cowan, gen. nov.

Stemodiae L. (nom. cons.) similis sed inflorescentia racemosa terminali, foliis nerviis principalibus 3-5, antheris pubescentibus, fructibus stylis corpor capsulae multo brevioribus, et seminibus trapezoidibus paginis alveolati-reticulatis distinctus.

Suffruticose perennial herbs to 1 m high. Leaves opposite, simple, petiolate, with 3 principal nerves or somewhat subpinnately nervate, the margins serrulate. Flowers arranged in terminal bracteate racemes. Calyx ebracteolate, the lobes free and essentially alike. Corollas tubular, n. akedly zygomorphic with well defined upper and lower lobes. Anther thecae pubescent dorsally with stiff white hairs. Capsules ovoid (4-5 mm high), 4 valvate, the styles persistent but much shorter than the body (ca. 0.3 mm long). Seeds trapezoidal, estipitate, alveolate-reticulate.

Type species, Darcya reliquiarum (D'Arcy) B.L. Turner & C. Cowan.

KEY TO SPECIES

- 1. Branches of the inflorescence glabrous; Costa Rica. D. costaricensis
- 1. Branches of the inflorescence pubescent; Panamá and Colombia.(2)

Darcya costaricensis (B.L. Turner) B.L. Turner, comb. nov. BASIONYM: Stemodia costaricensis B.L. Turner, Phytologia 73:253. 1992. TYPE: COSTA RICA. Cartago Province: "1-4 km beyond first bridge within Hydroelectric Plant Property (Instituto Costaricensis Electricidad) enroute to the reservoir at the road terminus," 4800-4900 ft, common but very local, 4 Mar 1981, F. Almeda & K.Nakai 4734 (HOLOTYPE: TEX!; Isotype: CAS).

Sprawling or trailing suffruticose glabrous perennial herbs 10-100 cm high. Midstem leaves mostly 2-4 cm long, 1.0-1.8 cm wide; petioles mostly 3-8 mm long; blades broadly ovate to triangular ovate, trinervate to somewhat subpinnately nervate, minutely punctate beneath, the margins serrulate. Flowers arranged in terminal bracteate racemes 3-8 cm long, the pedicels glabrous,

mostly 8-14 mm long. Calyx glabrous, ebracteolate, mostly 3-4 mm long, the lobes essentially alike and free to the base. Corollas reportedly deep violet blue and "Lobelia-like", the tube ca. 3 mm long, the upper 2 lobes 2.5-3.0 mm long, the lower 3 lobes mostly 3-6 mm long, the central lobe 4-6 mm long. Anther thecae ca. 0.5 mm long, pubescent, separated by a globose connective. Capsule ovate, ca. 4 mm long. Seeds numerous, brown, trapezoidal, finely ornate like the hull of a peanut, ca. 0.5 mm long.

DISTRIBUTION: Known only from the vicinity of the type locality; flowering November-January.

ADDITIONAL SPECIMENS EXAMINED: COSTA RICA. Cartago: Twenty or more specimens as given with the original description.

Darcya reliquiarum (D'Arcy) B.L. Turner & C. Cowan, comb. nov. BA-SIONYM: Stemodia reliquiarum D'Arcy, Ann. Missouri Bot. Gard. 66:258. 1979. TYPE: PANAMA. Chiriquí: La Popa above Boquete, 1500-2500 m, 20 Mar 1977, W.G. D'Arcy 10893 (HOLOTYPE: MO!; progeny of type material grown from seed, F!,K!,MO!).

Sprawling perennial herbs to 40 cm high. Stems sparingly branched, sparsely pubescent, glabrescent with age. Midstem leaves mostly 3-6 cm long, 1.4-2.6 cm wide; petioles 5-10 mm long, gradually tapered upon by the blades; blades ovate, with 3 principal nerves from near the base, glabrous or nearly so, minutely glandular punctate beneath, the margins irregularly serrate. Flowers arranged mostly in terminal bracteate racemes, the pedicels sparsely pilose, mostly 9-16 mm long. Sepals 2-4 mm long, all alike, without basal bracts, glabrous or nearly so. Corollas 4-5 mm long, blue, glabrous or nearly so, the lobes subequal, 2-3 mm long, minutely pubescent ventrally. Anther thecae ca. 0.25 mm long, pubescent dorsally with conspicuous stiff white hairs, the thecae sessile or one of these on a short stipelike connective. Capsule ovate (in outline), 4-5 mm high, the persistent style ca. 0.3 mm long, ca. as long as the stigmatic area, 4 valvate. Seeds trapezoidal, alveolate-reticulate, estipitate, ca. 0.3 mm long.

DISTRIBUTION: Panamá, where it is known only from cloud forests near Boquete, 1200-1700 m; flowering July-March.

D'Arcy provided an illustration of this species along with his original description.

Darcya mutisii (Fern. Alonso) B.L. Turner, comb. nov. BASIONYM: Stemodia mutisii Fern. Alonso, An. Jard. Bot. Madrid 44:394. 1987. TYPE: COLOMBIA. Depto. de Cundinamarca, Mpio. de San Bernardo, 1600 m, 27 Jun 1948, M. Schneider 581-A (HOLOTYPE: COL 81234).

This recently described species was first collected and illustrated following the Real Expedición Botánica del Nuevo Reino de Granada, under the direction of Mutis (1760-1790). The original illustration has been republished in black and white by F. Alonso with his original description. While I have not examined type material, the illustration and description leaves little doubt that the plant concerned belongs to Darcya. Indeed, it is closely similar to both D. reliquiarum and D. costaricensis but readily distinguished by its glandular pubescent inflorescence.

ACKNOWLEDGMENTS

We are grateful to Guy Nesom for the Latin diagnosis and to him and T.P. Ramamoorthy for reviewing the manuscript.

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